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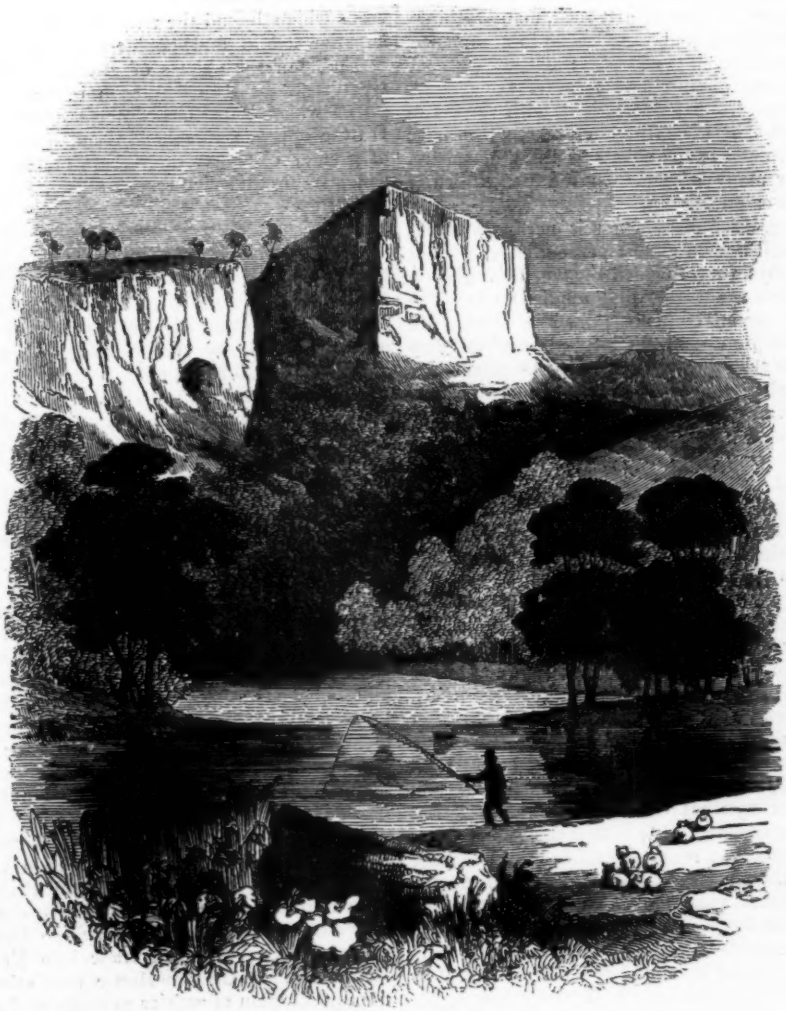
MATLOCK HIGH TOR, DERBYSHIRE



[The High Tor at Matlock.]

THE word *tor* is a Saxon one, from whence, according to the etymologists, comes our word *tower*. The Latin *turris*, the Saxon *tor*, and the English *tower*, appear to be related in their signification, meaning, in their original sense, something erected on an eminence. We have preserved the syllable tor, as we have many other words which are of what are termed Cimbro-Celtic and Teutonic or Gothic origin, in the names of many places of Britain. In the counties of Derby, Devon, and Cornwall, there are numerous masses of gritstone and granite, fantastically piled, some of which form what are called "logans," or rocking-stones, and popularly "cheese-wrings," or whatever else the common notion may fancy them to resemble *. Many of these masses are to be found on great eminences, along with those mysterious circles and rock-basins which are ascribed to the Druids. Dartmoor in Devonshire abounds with those seemingly artificial but really natural tors, which still bear the name of "tor," along with some distinctive and expressive adjective. These Mrs. Bray, in her recent work 'The Tamar and the Tavy,' laments are beginning to fall before the hammer of the railroad labourer, their immense masses being found useful for the purposes of those who look more to present utility than to the recollections of the past. That many of these tors were used by the original inhabitants of Britain, or at least by their priests, appears probable. Hence has arisen the controversy, whether the tors, bearing as they do the marks of having been used for some kind of ceremony or religious rite, were piled by the hand of man, or formed by the action of the elements. If piled by manual labour, how was the work performed—whence the knowledge of mechanics? And yet the singular and fantastic manner in which many of them are piled, as if some gigantic hand had

* See 'Penny Magazine,' No. 244.

lifted them there, seems to forbid the idea that Nature, or, strictly and properly speaking, (for the word nature is a mere personification,) the action of natural causes, should have produced results apparently so whimsical. But to lay aside all useless guessing, which only provokes curiosity without gratifying it, the common-sense way of settling the question would appear to be this:—if these tors, which are found with circles and rock-basins, were really used by the Druids, why, they must have found them there, and appropriated them to their purposes. "Here, too," say the authors of the 'Magna Britannia,' speaking of Derbyshire, "as in Cornwall, among the detached masses of grit-rock, many rocking-stones have been found, and rock-basins in abundance, and, as usual, ascribed to the Druids: but, as we have before observed, we are inclined to refer the greater part of these to natural causes; indeed, with respect to the round hollows in the grit-stone rocks, which have for ages been exposed to the effects of the atmosphere, we observed as many of them on the perpendicular sides of the rock as on the top."

The preceding brief disquisition is necessary to explain how the well-known almost perpendicular rock at Matlock, in Derbyshire (of which the wood-cut gives a view), should have the word "tor" applied to it. The tors are usually on an eminence; for the Druids are supposed to have preferred some lofty place where they could see and be seen during their religious ceremonies in a manner calculated to impress the rude imagination. So the word came to signify, not merely the singular masses of which we have been speaking, but also any abrupt steep rock, rising, as it were, detached and alone. But it is always accompanied, as already mentioned, by some qualifying adjective. The "*High* Tor," which is a comparatively modern application of the name, sufficiently explains itself;—but Mam Tor (another tor in Derbyshire) means the "shivering mountain."

Matlock is well known as one of our English favourite summer resorts of invalids and idlers, as well as of those who go, for recreation or information, to see the wonders of the Peak of Derbyshire,—the rocks, mines, and caverns, and other mountainous scenery of that truly singular and interesting region. "Matlock Dale," says Mr. Jewitt, in a little work called the 'Matlock Companion,' is naturally a deep narrow ravine, how produced, or by what convulsion, must be left to geologists to determine. One side is formed by lofty perpendicular limestone rocks, the other by the sloping sides of giant mountains; along the bottom runs the Derwent, sometimes pent up in a narrow channel, and obstructed by the fragments which have, from time to time, fallen from the beetling tor, and sometimes spreading like a lucid lake, and reflecting as a mirror the beautiful but softened tints of the overhanging foliage." The mineral springs and scenery of Matlock Dale have created a pleasant village, composed of inns, lodging-houses, and bathing-establishments. The Dale is about two miles in length. "Much money," says Mr. Jewitt, in an amusing strain, "is obtained here by collecting what they call *curiosities* (that is, spars, lead-ores, &c., in their natural state), and selling them to visiters. Almost every person is in possession of something or other to turn into money; and petrifaction-shops, under the name of 'museums,' to which not unfrequently is prefixed the word royal, stare the stranger in the face at every step. One would not, at a distance of perhaps 140 miles from London, expect kings and princes to be such familiar visitants. In fact, the inhabitants of Matlock, though not reputed alchymists, seem to make of every spar or pebble a philosopher's stone, which, though not always convertible into *gold*, seldom fails to produce *silver*."

Matlock Dale, which in the time of De Foe was almost inaccessible from the want of a road, and which, still more recently, was praised as being a retired secluded spot, now lies on the direct line from London to Manchester. This, as is well remarked by Mr. Jewitt, though destroying the previous character of the place, has brought it more into notice, and a much larger accession of visiters than it could have otherwise received.

The High Tor is a huge rock, which rises almost perpendicularly from the Derwent to a height of upwards of 400 feet. The lower part is covered with foliage, but the upper part presents a broad bold front of grey limestone. It forms a part of the chain of rocks which bound the river on the east, but from its superior height and boldness is one of the most remarkable of the objects of Matlock Dale, and is distinguished for its effect, even in the midst of scenery all of which is celebrated for its picturesque beauty. On the opposite side is Masson, a rock or mountain of greater elevation than the Tor, but inferior to it as a striking and picturesque object.

WATCHMAKING IN SWITZERLAND.

The following details are given in an abridged form from a 'Report on the Commerce and Manufactures of Switzerland,' by Dr. Bowring, recently laid before Parliament. A large portion of the facts were furnished to Dr. Bowring by M. Houriet, an intelligent manufacturer, who, in his communication, dated January, 1836, asks for indulgence on the plea that he is neither "a learned man nor a writer," and yet, says Dr. Bowring, "a more interesting and instructive document has seldom, I believe, been furnished."

One of the largest and most interesting branches of Swiss industry is the watchmaking trade. It is carried on to an immense and still increasing extent in the mountainous districts of Neuchatel, in the French portion of the Canton of Berne, and in the town and neighbourhood of Geneva. It has been a source of wealth and comfort to many thousands of the inhabitants, who, in the seldom-visited villages of the Jura, have gathered around them a large portion of the enjoyments of life. Switzerland has long furnished the markets of France; and though the names of certain French watchmakers have obtained a European celebrity, yet Dr. Bowring was informed by M. Arago that an examination into this trade had elicited the fact that not ten watches were made in Paris in the course of a year, the immense consumption of France being furnished from Switzerland, and the Swiss works being only examined and rectified by the French manufacturers. The contraband trade into France was immense, and no Custom-House regulations could stop the introduction of articles so costly and so little bulky. They are now admitted into France at 6 per cent. for gold, and 10 per cent. for silver, watches, and a considerable quantity pays this moderate duty.

The Jura mountains have been the cradle of much celebrity in the mechanical arts, particularly in those more exquisite productions of which a minute complication is the peculiar character. During the winter, which lasts from six to seven months, the inhabitants are, as it were, imprisoned in their dwellings, and occupied in those works which require the utmost development of skilful ingenuity. Nearly 120,000 watches are produced annually in the elevated regions of Neuchatel. In Switzerland the most remarkable of the French watchmakers, and among them one who has lately obtained the gold medal at Paris for his beautiful watch-movements, had their birth and education; and a sort of honourable distinction attaches to the watchmaking trade. The horologers consider themselves as belonging to a nobler profession than ordinary mecha-

nics, and do not willingly allow their children to marry into what they consider the inferior classes.

The art or trade of clockmaking was introduced into the mountains of Neuchatel in a manner worthy of notice. As early as the seventeenth century some workmen had constructed clocks with weights, but no idea had been conceived of making clocks with springs. About the end of that century, an inhabitant of the mountains, returning from a long voyage, brought with him a watch, which was an object previously unknown in the country. It was put into the hands of a skilful workman to be repaired, who succeeded in doing so, and then tried to make a similar article. He succeeded in effecting this also, notwithstanding the difficulties which lay in his way, he having to construct the tools with which he wrought, as well as all the different movements of the watch. His success naturally created a great sensation; other workmen were stimulated to try what they could do, and a new branch of industry sprung up in the mountains of Neuchatel. During the first forty or fifty years a few workmen only were employed in watchmaking; and owing to the numberless difficulties they had to surmount, to the slowness of execution caused by the absence of convenient tools, the want of proper materials, &c., the productions and profits were inconsiderable. They began at length to procure the articles of which they stood in need from Geneva, and afterwards from England; but the high prices which these articles cost induced many of the workmen to attempt to provide them for themselves. They not only thus succeeded in rivalling foreign tools, but they eventually made many superior ones till then unknown. From that period they have constantly invented other instruments in order to facilitate and perfect the art of watchmaking; and at the present moment the manufacture of watchmaking tools and appurtenances is become a branch of industry of so much importance, as to enable the inhabitants to supply them to those countries from whence they formerly imported them.

It is not more than eighty or ninety years since a few merchants began to collect together small parcels of watches, in order to sell them in foreign markets. The success which attended these speculations induced and encouraged the population to devote themselves still more to the production of articles of ready sale; so much so, that nearly the entire inhabitants have embraced the watchmaking trade. The population has increased threefold, independently of the great number of workmen who are established in almost all the towns of Europe, in the United States of America, and even in the East Indies and China. From this period a great change has taken place in the country of Neuchatel, where, notwithstanding the barrenness of the soil and the severity of the climate, beautiful and well-built villages are everywhere to be seen, connected by easy communications, together with a very considerable and industrious population, in the enjoyment, if not of great fortunes, at least of a happy and easy independence.

"If our watches," says M. Houriet, "have attained a certain reputation of superiority, it is in a great measure to be attributed to the independence of our workmen, and to the advantage which they have derived from a careful and studied execution of the several articles intrusted to their respective and particular talents. Indeed, on the one hand, each artisan working at home, and for whomsoever, pays him the best price, and on the other, the merchant having an interest to encourage by paying the best prices to those who furnish him with the best materials and work, a kind of emulation is naturally excited among the workmen to obtain a preference and an advantage. Perhaps, also, the spirit which is generally diffused among the inhabitants of mountainous countries, added to the habits and customs of our workmen, who are at the same time landed proprietors, has not a little contributed to this development of talent amongst our population. Living simply, and in the bosom of their families, occupied entirely (with the exception of a few slight agricultural cares) in the labours of their art, and not being exposed to those temptations which exist in and corrupt large societies, it is very natural that they should be more assiduous and more desirous of attaining perfection in their art; and the more so still, as they derive a greater benefit from it, their reputation and their interest are equally engaged.

"The present condition of this branch of industry is extremely prosperous, and it is with great difficulty that we can succeed in executing all the orders which we receive.

"As to the probable fate of this trade, it is even permitted to hope, and with much probability, that it is yet susceptible of extension. A watch is no longer, as it was formerly, an object of luxury, destined exclusively for the rich; it has become an article of the first necessity for every class in society: and as, together with the increased perfection of this article, its value has at the same time considerably diminished, it is evident that a common watch, which will exactly indicate the hour of the day, is actually (by its low price) within the reach of almost every individual who will likewise feel anxious to possess one. For this reason, and in proportion as commercial and maritime relations are extended and emancipated from the trammels in which the great central marts of commerce have involved them, so will distant nations become civilized; and it may be fairly anticipated that the art of watchmaking will form a part of the great current of improvement.

"The number of watches manufactured annually in this canton [Neuchatel] may be calculated to be from 100,000 to 120,000, of which about 35,000 are in gold, and the rest in silver. Now, supposing the first, on an average, to be worth 150 francs, and the others 20 francs, it would represent a capital of nearly 7,000,000 francs, without taking into consideration the sale of clocks and instruments for watchmaking, the amount of which is very large.

"Not only the whole of the European markets, but also those of the most distant countries, are now opened to our productions. The United States of America consume the largest proportion of our watches. There is, however, a great difference with respect to the degree of facility which is afforded to us by the several nations with whom we deal. In Austria, and in all the countries under her dominion, as well as in Sweden, our clocks and watches are prohibited, and only penetrate by fraud. In England, the duty is twenty-five per cent. for home consumption; and for the colonies, though there is in London a bonding depôt, it offers too many disadvantages and impediments to permit us to make use of it: for an article of such careful and delicate construction ought not to be mixed pell-mell with grosser commodities, as it runs too great a risk of being seriously damaged. In Spain, and in most of the Italian States, the duty is equivalent to a prohibition. In France, the duty has recently been reduced sufficiently low to render smuggling unnecessary. In Russia and in the United States, the duty, though high, can still be borne. In Prussia, the duty has always been moderate, and of late years it has been reduced by one-half in favour of our productions. Finally, the States of the German and the Swiss Confederation are the only countries which have been entirely open to this species of commerce; and it has always been easy to forward to Turkey and to the Levant by the free ports of the Mediterranean. We are making arrangements with Russia for an overland trade to China."

With the exception of gold and silver for the manufacture of the watch-cases, the other materials for the construction of the works or mechanism of the Neuchatel watches are of little value, consisting merely of a little brass and steel. The steel is imported from England, and is reckoned the best that can be procured; the brass, which was formerly brought from Holland, is now furnished by France, the French brass being now considered much superior. With respect to gold and silver, the inhabitants of Neuchatel have no other resource but to melt current money, which induces M. Houriet to suggest that an advantageous commerce might be opened up with such countries as possess the precious metals.

The number of workmen who are employed in watch-making is estimated by M. Houriet at from 18,000 to 20,000; but he says it is difficult to arrive at the exact number, as the population employed carry on the business in their own houses, and in the midst of their families. He calculates the wages of the workmen as running from 55*l.* to upwards of 83*l.* annually.

There are few districts in Europe where so large a proportion of the inhabitants are interested in savings banks as in the principality of Neuchatel. No less than 3084 persons, out of a population of 56,000 (being about one person in eighteen), had become depositors in 1834. There remained at the end of 1834, in the hands of the directors, a sum equal to 57,150*l.*, or, on an average, of about 18*l.* 10*s.* per individual. The interest allowed is three and a-half per cent., and the deposits are as low as one Neuchatel franc, or 1*s.* 1½*d.* The directors lend money at four per cent. on landed or other undoubted security. The establishment has existed for twenty-three years, and publishes its accounts annually. The administration, with the exception of the cashier, acts gratuitously.

The spirit of adventure is very strong among the industrious inhabitants of the Jura Mountains. A great many of them have travelled into very remote countries, whence some have returned with considerable fortunes. A few years ago a watchmaker of Neuchatel found his way to China, where he amassed a handsome property by importing watches; and he returned home since, accompanied by a young Chinese, whom he caused to be instructed in the trade, and who had sailed for Canton only a few weeks before Dr. Bowring's visit.

The ordinary rates of wages are, for male domestics, from 8*l.* to 12*l.* sterling, and for females, from 4*l.* to 6*l.* sterling per annum. The average wages of agricultural labour are from 20 to 30 sous of Neuchatel, or from 1*s.* 1*d.* to 1*s.* 8*d.* per day. The wages of artisans vary extremely, the lowest being about 15 sous, and the highest 8 to 10 francs, that is, from 9*d.* to 11*s.* per day. It is only, however, the most expert and highest class of artisans, comparatively few in number, who earn the last-mentioned sum.

ENGLISH COINS.

[Concluded from No. 277.]

Owing to the want of trade, Constantinople furnished most European kingdoms with gold coins, which received the name of bezants, from Byzantium, the ancient name of that capital; and the term is still preserved in the blazon of arms where plates of gold are called bezants.

Bezants were the *solidi* of the old scale; they were six to the ounce, and they were in use till beyond the time of William Rufus; but it is asserted that their value was so entirely forgotten in the time of Edward III., that when the Bishop of Norwich was fined a bezantine of gold, to be paid to the Abbot of St. Edmondsbury for infringing his liberty, no one could tell how much it was; and it was left to the king to decide how much he should pay. It also appears that bezant was a term applied to all kinds of gold money, and it was succeeded in the same general sense by the florin.

The first English gold coin is the penny of Henry III. (Fig. 32); it was current for twenty silver pennies, and was coined about 1257, it being the only gold piece stamped with the name of the Mint and moneyer. This monarch is stated to have coined it through distress for money; it is, perhaps, more properly called a ryal, and it was the first of the sort struck in Europe. This coin is very rare, three impressions only being known; and the gold series may be said to commence with Edward III., for no more appear till 1344, when that monarch issued a proclamation*, in consequence of which florins, half-florins (Fig. 35), and quarters

Fig. 35.

[Half-florin of Edward III.—Gold, 3*s.*]

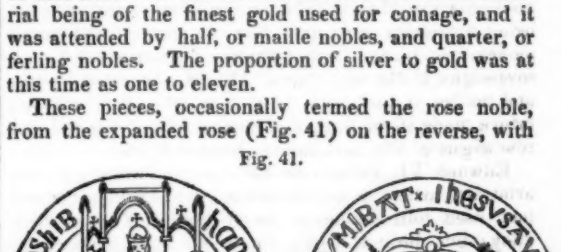
were struck. The florin was then of 6*s.* value, but it is now intrinsically worth 19*s.*; it was an imitation of the florins of Florence, which bore on one side a large *fleur de lys*, and on the other St. John the Baptist. The forcible description by Dante of the agony of thirst induced by the ideal appearance of the green hills and rivulets of his native place, applies to a forger of these coins, as appears by these lines:—

"Ivi è Romena la dov' io falsai
La lega suggellata del Battista
Perch' io il corpo suso arso lasciai."—
'Inferno,' canto xxx.

The coins of Rome, France, and England at this period have types nearly similar to the Florentine florin, but with different legends. The half-florin was sometimes called a halfpenny, and the quarter-florin a farthing (meaning of gold), which terms are by old historians sometimes applied to the divisions of ryals and angels. The florin, not dividing the larger ideal denominations equally, was found to be inconvenient; and in the same year the noble of 6*s.* 8*d.* value was struck, that being half a mark, the most general ideal money of that time. It was termed the noble from its material being of the finest gold used for coinage, and it was attended by half, or maille nobles, and quarter, or ferling nobles. The proportion of silver to gold was at this time as one to eleven.

These pieces, occasionally termed the rose noble, from the expanded rose (Fig. 41) on the reverse, with

Fig. 41.



[Rose Noble, or Ryal, of Henry VI.—Gold, 10*s.*]

* "Que trois monoies d'or soient faites en nostre Tour de Londres: c'est assavoir une monoie ad deux Leopert; courante la piece pur siz soldz que serra du pois de deux petits florins de Florence de bone pois.

"Et une autre monoie d'or ad une Leopert; poisante la moiete de l'untre susdite monoie currante la piece pur Trois soldz.

"Et une autre monoie d'or ad un heaume; poisante la quarte

their halves and quarters, were the only gold coins till the angels of Edward IV., in 1465, impressed with the figure of St. Michael and the Dragon, and the angelet, or half-angel, of 3*s.* 4*d.* value; forty-pence became afterwards a proverbial expression for a small wager. The old lady says to Anne Boleyn, in Shakspeare's play of 'Henry VIII.,' "How tastes it? Is it bitter? Forty-pence, no." Forty-pence, or three-and-fourpence, still remains in many offices the legal and established fee. The angels of Henry VI. (Fig. 40) being struck

Fig. 40.

[Angel of Henry VI.—Gold, 6*s.* 8*d.*]

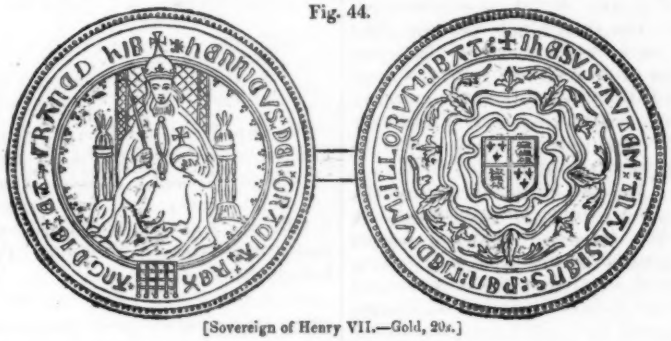
during his restoration, are a little posterior in date to those of Edward IV. There had been, indeed, the gold coin called the chaise (Fig. 36), but that was an Anglo-Gallic piece of Edward the Black Prince, and does not in strictness belong to the English series; it was called the chaise, from his appearing on it seated in a chair of state. There are still larger gold coins of this prince, but the largest portrait is on his billon coins, in which he has an aquiline nose, a feature very

Fig. 36.

[Gold Chaise of Edward the Black Prince.]

different in his monument at Canterbury. His coins are known by his invariable style, "Primogenitus Regis Angliæ et Princeps Aquitaniæ." There was a master and worker of the Mint appointed in the name of Edward V., but it is not probable that he coined any new monies. Antiquarians assert that, gold being scarce, Henry V. diminished the noble in size, though he retained the value of it; but that Henry VI. restored its size, and made it pass for 10*s.*, under the new name of ryal (Fig. 41), a term borrowed from the French, who gave that name to their coin on account of its bearing the figure of the king in his royal robes. The ryal of 10*s.* and the angel of 6*s.* 8*d.*, with their divisions, were the sole gold coins till 1485, when Henry VII. published the double-ryal, or sovereign, of 20*s.* (Fig. 44),

Fig. 44.

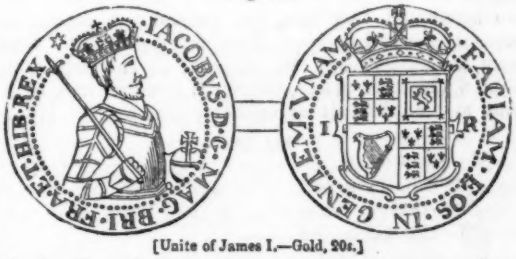


[Sovereign of Henry VII.—Gold, 20*s.*]

and the double-sovereign of 40*s.* Henry VIII. added to the gold denominations the crown (Fig. 47) and half-crown; but these coins are only equivalent to the half and quarter-ryal, known since Henry VI., and the term crown appears in the reign of Henry VII. The gold crown of Henry VIII. is, however, remarkable for being a primary coin, and, like all modern hammered money, its tenuity is considerable. This monarch struck sovereigns of 22*s.* 6*d.*, ryals of 11*s.* 3*d.*, angels of 7*s.* 6*d.*, and nobles at their old value of 6*s.* 8*d.* In 1546 this prince made silver to gold as one to five, and published sovereigns of 20*s.* and half-sovereigns of 10*s.*

Edward VI. found the coin much debased by the arbitrary measures of his father, who in a troy pound had used four ounces of silver and eight ounces of alloy; but bullion being imported from Sweden by Edward VI., good specie was coined, and much of the base metal formerly issued was recalled, so that the coin returned to the old standard in 1551. Till Edward VI. the princes appear on these gold coin at full or three quarter length, but of that monarch only the bust is seen. Sovereigns, on the accession of James I. to the English throne, were called unites (fig. 53), and sometimes sceptre pieces; they were of 20*s.* value; there were also ryals of 30*s.*, spur ryals of 15*s.*, angels of 10*s.*, and angelets of 5*s.* The gold crown and half-crown continued to this king inclusive, and the crown to his successor. The large gold coins of James I.,

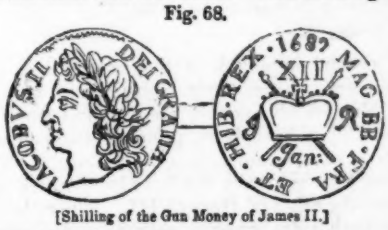
Fig. 53.



[Unite of James I.—Gold, 20*s.*]

Charles I. and II., and James II., were sometimes called Jacobuses and Caroluses. The sovereign, which

Fig. 68.



[Shilling of the Gun Money of James II.]

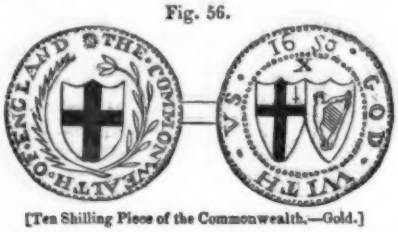
had been likewise termed the broadpiece, sasumed under the Commonwealth, the name of the twenty-shilling piece, bearing, in common with the other Commonwealth pieces, the legend "God with us:"

partie de la susdite primere monoie, currante la piece pursed it oct deners.

"Les queles monoies d'or deivent avoir cours entre tutes maneres des gentz, deinz le dit roialme d'Engleterre," &c.—*Rymer's Fœdera.*

it retained that name till it was supplanted by the guinea. There were also ten shilling (fig. 56) and

Fig. 56.

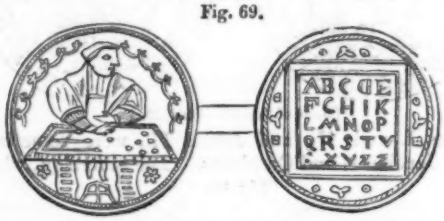


[Ten Shilling Piece of the Commonwealth.—Gold.]

five shilling pieces of gold. Oliver Cromwell struck none but forty shilling and twenty-shilling pieces, and very few even of these, the former being mostly pattern pieces. The guinea, so denominated from the gold of which it was made, being imported from Guinea, was coined in the reign of Charles II. to pass for 20*s.*, but by tacit and universal consent its current value was never less than 21*s.* This prince also issued half-guineas, double guineas, and five-guinea pieces, which continued to be the usual denominations till towards the close of the reign of George III., when double sovereigns, sovereigns, and half-sovereigns were struck, of the same type as those at present in circulation; the coins larger than the guinea or sovereign were never commonly current. George I. and III. published quarter guineas, but they were found so troublesome, and so liable to be lost from their small size, that they were stopped at the bank in the reign of the latter monarch. A few pieces of seven shillings were coined in the reign of George III., but from their approaching the half-guinea so nearly in size, they were found very inconvenient. In 1696 the guinea rose in value to 30*s.*, but after the grand recoinage of William III., it fell by degrees to 21*s.* In 1733 all the old gold coins, the unite, the Jacobus, the Carolus, and the broadpiece were called in and their currency forbidden. In the last war the value of guineas varied from 21*s.* to 30*s.*, and when so many local notes were in circulation, all gold was hoarded, till Sir Robert Peel's bill annihilated the one pound notes, and compelled the gradual resumption of cash payments.

Before leaving this subject, it may be proper to mention the jettons or counters, and the touch, although neither are really to be called coins; the former, which are small and very thin, are generally of copper or brass, but occasionally of silver, or even of gold: they were commonly used for purposes of calculation, in abbeys and other places, where the revenues were complex and of difficult adjustment, and fig. 69 repre-

Fig. 69.



sents a person employed in the arithmetical process with counters. From their being found among the ruins of English abbeys they are usually termed abbey counters. They have been principally coined abroad, particularly at Nuremburgh, (see Snelling's 'Treatise on Jettons') though some few have been struck in England since the reign of Henry VIII. The most ancient bear on both sides crosses, pellets, and globes; the more modern have portraits and dates and heraldic arms on the reverse. The legends are at times religious, and at others *Gardez vous de mescompter*, and the like.

The English touch-pieces generally bear the device of St. Michael and the Dragon on one side, and a ship on the other—the king, when he touched a person to cure the evil, as it was vainly fancied,

> "Hanging a golden stamp about their necks,
> Put on with holy prayers."—Shakspeare.

The ceremony was suspended during hot weather as being "neither safe nor fit;" and in Charles II.'s time during the month of April. On account of persons coming two or three times to obtain the money, it was ordered that the applicants should bring a certificate from the minister and churchwardens that they had not been touched before. The latest of these pieces are of James II., Queen Anne, and the Pretender. The efficiency of the touch of a king in curing diseases appears to be a superstition of very ancient date, for Pliny states that Pyrrhus could cure the spleen with a touch of his foot.

The Mint value of a pound troy of gold is now 46*l.* 14*s.* 6*d.*, the ounce 3*l.* 17*s.* 10½*d.*; and the pound troy of silver is coined into 66 shillings. The weight of coins is now so exact, from the use of the sizing machine, that of 1000 sovereigns there was no variation in 500 from the proper weight.

Weights of the Coins in Circulation.

	Oz.	Dwt.	Grs.
Gold.			
Five Sovereign	1	5	16,370
Double Sovereign	0	10	6,549
Sovereign	0	5	3,274
Half-Sovereign	0	2	13,637
Silver.			
Crown	0	18	4 4/11
Half-Crown	0	9	2 2/11
Shilling	0	3	15 1/11
Sixpence	0	1	19 7/11

Fleetwood's 'Chronicon Preciosum,' second edition; Fosbrooke's 'Encyclopædia of Antiquities;' Pinkerton's 'Coins and Medals;' Folkes' 'Tables of English Silver and Gold Coins;' the 'Archæologia;' 'Companion to the British Almanac, 1828;' Akerman's 'Coins of the Romans relating to Britain;' 'Private Collections of Coins,' &c.

THE CLOCKMAKER'S SALT-WORKS AT GOZA.

The small island of Goza is situated about four miles to the east of Malta, of which it is a dependency. There is a curious esplanade there, to the west of the hill Zebug, and at the lowest part of a valley leading to the sea. The entrance to it, landwards, is through a long range of rocks, gently declining towards the shore, but stopping abruptly just above it, where the rocks become perpendicular cliffs, standing thirty or forty feet above the level of the water. Some seventy and odd years ago an ingenious clockmaker of Malta, who was proprietor of this rocky esplanade, thought he could derive some advantage from what was otherwise wholly unprofitable, by converting it into a salt-pan, or place where salt might be procured from sea-water by evaporation. The intense summer-heat which was concentrated there by the surrounding rocks and hills, promised a rapid process, and he went to work in the hopes of making the sterile spot an El Dorado, but without any notion of the strange results which actually took place. He dug a reservoir, and built a wall along the edge of the precipice to retain the sea-water, which it was necessary to spread over a large surface. This done, he busied himself in devising means to raise the water, for to draw it up at the edge of the cliffs was found to be a great waste of labour. After sundry experiments and examinations, he at last discovered that there was a cave or grotto running under the rocky esplanade, which communicated with the sea, and admitted the water to the very point where he wanted it, though it was still some thirty or forty feet beneath the level of his pans. He therefore cut through

the rock that formed the vault or roof of the grotto, and thus made a sort of well through which the sea-water was drawn up. Having spread the briny fluid over a wide surface, he was delighted to find that it diminished in depth with great rapidity, which he attributed solely to evaporation, and the natural effects of the sun's rays. In order to increase his harvest, he kept pouring on more and more sea-water, and this he did until he was thoroughly convinced he should have a thick layer of pure salt. But alas! the water, instead of being evaporated, and leaving its solid brine behind, was absorbed by the spongy rock, through which, by filtration, it soon returned to the places from which it had originally been brought, or to the marine grotto and sea beneath, and when the poor clockmaker went to gather his harvest, he found nothing but a coating of mud, the acid of the salt-water having partially dissolved the superficies of the rock on which it had been retained. This was a cruel disappointment, but the enterprising artisan should have remembered the old proverb, and have looked before he leaped: the slightest elementary knowledge of chemistry and geology would have preserved him from this error, which indeed he might have avoided, without any science at all, by making one or two experiments on the rocks, or even by simply observing the natural processes constantly in operation, which would have plainly shown to him that the soft tufo rocks of Malta and Goza are not only excessively porous, but liable to rapid decomposition under sea-water.

The clockmaker fell sick of grief and disappointment, and had a long and dangerous illness. But his misfortunes, and the evil effects of his want of forethought, did not end here. As winter approached, the weather, as usual, became windy, and the sea rough. "One day in particular," says Boisgelin, the historian of Malta, "a terrible storm arose, and the violence of the wind drove the raging waves into the grotto under the salt-works, where the body of water increasing considerably, and being confined in this almost circular cave, acted with a rotatory motion, and formed a syphon or water-spout. There being no passage but the well newly opened by the clockmaker, it there forced its way through with violence, and appeared above like a beautiful wheatsheaf, of so large a circumference as to fill up the whole mouth of the well, and, rising perfectly entire to the height of sixty feet, formed a magnificent aigrette. Its projectile force was so great, that the wind could not act upon it till it had reached the above-mentioned height; when it suddenly separated, and the aqueous particles composing this immense body of water were diffused over the country on all sides to the extent of more than a mile. This violent rain of salt-water destroyed all vegetation, and the cultivated fields, which before had been amply productive, appeared as if they had suffered from fire." Those whose property had been thus devastated—whose grounds had been sown with salt, the extremity and the symbol of desolation in all eastern countries, vented curses against the poor clockmaker in the corrupted Arabic, which is still the language of the inhabitants of Malta and Goza, and with a vehemence and amplification that betrayed their Oriental origin. Not satisfied with this, they brought an action at law against the unfortunate projector, and claimed damages to a large amount. The clockmaker died before the affair was settled, but the mischievous results of his engineering survived him. To prevent further calamities, the people of Goza, whose property was exposed, stopped up the mouth of the well with large stones—an operation which occasioned another phenomenon as extraordinary as the first. "A great quantity of air," says Boisgelin, "was confined by the waves in the bottom of the grotto; which, being rarefied, repulsed the water with such violence as to cause the most terrible explosions, which not only shook the rock, but the whole of the neighbourhood. The tremendous noise of these different explosions resounded through all the grottoes*, and resembled a discharge of artillery of all sizes quickly succeeding each other. These sounds, being constantly echoed, had the effects of the most violent peals of thunder, particularly when different storms met together. Terror became general; and constant apprehensions were entertained that the rocks would be thrown down, under which this subterranean thunder never ceased to roar when the wind was high. This horrible noise still continues whenever the well is filled up with stones; but when the impetuous waves confined in the cavern have in some degree removed the stones at the bottom of the well, the water acts with the greatest violence upon them, breaking them, reducing them to powder, and driving them back into the sea. The first stones being carried away the others fall of course; and the well once cleared, the wheatsheaf of water forms again, and spreads desolation through the adjacent country."

In the course of a few years this destructive jet d'eau occurred several times; and every time it was seen, or the water was heard roaring and threatening in the cavern beneath, the peasants exclaimed, with sorrow and spite, "There 's that unlucky clockmaker again!"

Follies of Fashion.—In no instances have the folly and childishness of a large portion of mankind been more strikingly displayed than in those various, and occasionally very opposite, modes in which they have departed from the standard of nature, and sought distinction even in deformity. Thus, while one race of people [the Chinese] crushes the feet of its children, another flattens their heads between two boards; and while we, in Europe, admire the natural whiteness of the teeth, the Malays file off the enamel and dye them black, for the all-sufficient reason that dog's teeth are white! A New Zealand chief has his distinctive coat-of-arms emblazoned on the skin of his face as well as on his limbs; and an Esquimaux is nothing if he have not bits of stone stuffed through a hole in each cheek. Quite as absurd, and still more mischievous, is the infatuation which, among some Europeans, attaches beauty to that modification of the human figure which resembles the wasp, and compresses the waist until the very ribs have been distorted, and the functions of the vital organs irreparably disordered. —*The Chinese, by J. F. Davis, Esq.*

THE CABBAGE-TREE.

This magnificent tree is the *Areca Oleracea* of Linnæus; class *Monœcia*, order *Monadelphia*. It is also known as *Palma Maxima*, and *Palmeto Royal*, which name it has probably received from its great height and the beauty of its graceful waving foliage. It is found as well in the valleys as on the mountains of the West Indies. Its numerous dark-coloured roots have the appearance of so many round thongs; they are of great length, extending some yards into the ground where the nature of the soil is sufficiently sandy or porous to admit of their so doing. The trunk of the tree (which is usually about six or seven inches in diameter) is a little enlarged at the base, from thence it grows straight as an arrow, (particularly when of about thirty years' growth,) gradually tapering to a height, as has been stated, of 300 feet, but this is an exaggeration. Ligon mentions having seen these trees in Barbadoes as high as 200 feet. Bryan Edwards in Jamaica upwards of 150. Bayley in other islands from 70 to 120. Hughes considers the highest in Barbadoes, where they abound more than in the neighbouring

* Small gulfs, caverns, and grottoes, of various forms and sizes, occur almost every moment on the coasts of Malta and Goza. There are many caves close to the clockmaker's.

islands, not to have exceeded 134 feet. The substance of the tree, for about two or three inches in depth, is of a dark colour, and extremely hard and solid; within this is a rather white pith intermingled with small veins of a more ligneous nature. The hue of the bark resembles that of the ash, and is faintly marked at the distance of every four or five inches by the *vestigia* of the branches that have fallen. The appearance of the bark continues the same till within about twenty or thirty feet of the summit of the tree, where it changes to a beautiful deep sea-green, which colour prevails to the top. About five feet above the commencement of this colour, numerous branches encircle the stem, the lowermost spreading horizontally with great regularity, while the superior branches incline wavingly downwards with all the graceful elegance of so many plumes of feathers. The branches, which attain when full grown a length of about fifteen feet, are closely set on the stem alternately rising one above another. Their broad curved sockets completely surround the body of the tree, which is again visible among the upper branches, and is there enveloped in an upright green conic spire, which beautifully terminates its majestic height. On the upper side the branches are slightly grooved and rounded beneath. An immense number of pinnated leaves proceed from the branches, some of which are three feet in length and an inch and a half in breadth, gradually narrowing towards their points, and decreasing in length as they approach the extremities of the branches. The upper side of the leaf is smooth and shining—a strong and prominent rib in the middle of each affords it support on the lower side. It is part of the economy of this tree that the inferior or lower branch drops off monthly, bearing with it an exfoliated circular *lamina* of the green part of the stem; whenever this occurs, the green conic spire which arises from among the superior branches, partially bursts and sends forth a young branch, which remains the uppermost till the same process is again renewed, so that the spire, the common parent of all, thus continually supplies the loss of the lower branches, and the beauty of the tree remains undiminished. The green-coloured part of the stem differs not only in hue but in substance from that of the other part, as it is formed of several *laminæ* or separate layers of a tough bark of a like nature, about a quarter of an inch in thickness, which are arranged closely over each other. All the branches, as they successively grow to be old, are united by the broad socket of the footstalk to this outer *lamina* or layer; some time before the lower branch is quite withered, the green circular layer, which before appeared a solid part of the tree, divides vertically, preparatory to its falling off with the branch to which it is strongly attached, leaving the next succeeding layer apparently a constituent part of the tree. The first, second, third, and sometimes the fourth of these *laminæ* are green on the exterior and white within. The remainder of them have the outer side of a bright lemon colour, and the interior white. The part called the cabbage consists of the inner snow-white flakes, which contain a considerable portion of oil; they have something the flavour of an almond, and are esteemed a sweet and agreeable esculent; they are eaten raw, fried, or boiled, and, when they have undergone the latter process, are not unlike cabbage.

It is a well-known fact that cutting the cabbage destroys the tree, which may be the growth of half a century. The cabbage is consequently a dish principally seen at entertainments, and two negroes are usually dispatched to the mountains where these trees abound to cut what are required. The blossom displays itself at that part of the stem of the tree where the two colours unite. On its first appearance it is a husky *spatha*, growing to a length of about twenty inches, which is full of small white stringy filaments, with alternate protuberant knobs, not unlike a fringe of coarse white knotted thread; farinaceous yellow seed in embryo, resembling fine saw-dust, is abundantly dispersed among the filaments, which, after they are cleared of this dust, are converted into an excellent pickle. If the *spatha* is not cut young for this purpose, when ripe it bursts, and the filaments become ligneous with a bushy growth, consisting of many small leaves, which produce a considerable number of small oval thin-shelled nuts, about the size of unhusked coffee berries. The soft part of the leaves of this tree being removed, the inside texture is spun in the same manner as hemp or flax, and is used for cordage, fishing-nets, and things where strength is desirable. From the hard outside of the stem, laths for houses are cut, which are of great durability, and this wood is also applied to other useful purposes. Hughes ('Natural History of Barbadoes') states that when the trees are felled, or fall by the violence of the hurricanes, a species of grub breeds in the soft part of the trunk, which are about the size and length of the first joints of the thumb, and are eaten and esteemed a delicate morsel by the French of the neighbouring islands.

The cabbage-tree must be familiar to most readers, from the allusions to it in the tale of 'Paul and Virginia.'

[The Cabbage-Tree.]

, The Office of the Society for the Diffusion of Useful Knowledge is at 59, Lincoln's Inn Fields.

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